

CLAIMS

1           1. A system for managing parts requirements  
2 processes in an engineering environment, comprising:  
3           an enterprise system including:  
4               a workstation;  
5               a server;  
6               a network connection for allowing said  
7 workstation and said server to communicate; and  
8               a storage device coupled to said workstation;  
9           wherein said enterprise system is executing a bill  
10 of material assist application for managing said parts  
11 requirements processes.

1           2. The system of claim 1, further comprising:  
2           a database of parts information.

1           3. The system of claim 1, further comprising:  
2           a database of procurement information.

1           4. The system of claim 1, further comprising:  
2           a database of computer aided drafting information.

1           5. The system of claim 1, further comprising:  
2           a database of approved vendors lists.

1           6. The system of claim 1, further comprising:  
2           a database of bill of material files.

1           7. The system of claim 2, wherein said database of  
2 parts information is commercially provided, and wherein  
3 said database of parts information is accessible to said  
4 enterprise system by a communications link.

1           8. The system of claim 3, wherein said database of  
2 procurement information is commercially provided, and  
3 wherein said database of procurement information is  
4 accessible to said enterprise system by a communications  
5 link.

1           9. The system of claim 4, wherein said database of  
2 computer aided drafting information is commercially  
3 provided, and wherein said database of computer aided  
4 drafting information is accessible to said enterprise  
5 system by a communications link.

1           10. A method for managing parts requirements  
2 processes in an engineering environment via a bill of  
3 material assist application, comprising:  
4           importing component parts data listed on a bill of  
5 material to said bill of material assist application;  
6           mapping said component parts data to associated data  
7 fields provided by said bill of material assist  
8 application;  
9           aggregating information from a plurality of sources  
10 and correlating said information to said components parts  
11 data; and  
12           providing results of said correlating said  
13 information in a summary form to a user of said bill of  
14 material assist application.

1           11. The method of claim 10, further comprising  
2 modifying said component parts data on said bill of  
3 material by said user in response to reviewing said  
4 results of said correlating said information.

1           12. The method of claim 10, further comprising:  
2           generating an approved vendor list indicating  
3 approved sources of component supply for items on said  
4 bill of material; and  
5           comparing approved vendors on said approved vendor  
6 list for alternative sources of said component supply.

1           13. The method of claim 12, further comprising  
2       modifying said bill of material list based upon said  
3       comparing.

1           14. The method of claim 10, further comprising  
2       transferring said bill of material list to relevant  
3       entities for review or approval.

1           15. The method of claim 14, further comprising  
2       modifying said bill of material list based upon said  
3       review or said approval.

1           16. The method of claim 10, further comprising:  
2       transferring said bill of material list to said  
3       user; and  
4       transferring said bill of material list to at least  
5       one of said relevant entities.

1           17. The method of claim 10, wherein said importing  
2       said component parts data to said bill of material assist  
3       application is performed manually by said user.

1           18. The method of claim 10, wherein said importing  
2       said component parts data to said bill of material assist  
3       application is performed electronically via said bill of  
4       material assist application whereby said component parts  
5       data is stored in a database accessed by said user.

1           19. The method of claim 10, wherein said plurality  
2 of sources include:

3           at least one parts database;  
4           at least one procurement database;  
5           at least one computer aided drafting database;  
6           at least one approved vendors database; and  
7           external supplier databases.

1           20. The method of claim 10, wherein said  
2 aggregating information includes data pertaining to:

3           lead time;  
4           currently supply status;  
5           single or multiple source;  
6           end of life date; and  
7           preferredness rating.

1           21. The method of claim 20, further comprising data  
2   pertaining to:  
3           map flags;  
4           life cycles;  
5           duplicate local part numbers;  
6           local part numbers;  
7           part descriptions;  
8           leaf class description;  
9           messages;  
10          supplier names;  
11          supplier part numbers;  
12          alternative local part numbers;  
13          quantities;  
14          data providers;  
15          engineering changes;  
16          engineering statuses;  
17          technical usage codes;  
18          engineers names;  
19          supply statuses;  
20          restricted usage codes;  
21          end of life dates;  
22          lead times;  
23          part sourcing statuses;  
24          reference designators;  
25          commodities; and  
26          comments desired by a system user.

1           22. A storage medium encoded with machine-readable  
2 computer program code for managing parts requirements  
3 processes in an engineering environment via a bill of  
4 material assist application, the storage medium including  
5 instructions for causing a computer to implement a method  
6 comprising:

7           importing component parts data listed on a bill of  
8 material to said bill of material assist application;

9           mapping said component parts data to associated data  
10 fields provided by said bill of material assist  
11 application;

12           aggregating information from a plurality of sources  
13 and correlating said information to said components parts  
14 data; and

15           providing results of said correlating said  
16 information in a summary form to a user of said bill of  
17 material assist application.

1           23. The storage medium of claim 22, further  
2 comprising instructions for causing a computer to  
3 implement:

4           modifying said component parts data on said bill of  
5 material by said user in response to reviewing said  
6 results of said correlating said information.

1           24. The storage medium of claim 22, further  
2 comprising instructions for causing a computer to  
3 implement:  
4           generating an approved vendor list indicating  
5 approved sources of component supply for items on said  
6 bill of material; and  
7           comparing approved vendors on said approved vendor  
8 list for alternative sources of said component supply.

1           25. The storage medium of claim 24, further  
2 comprising instructions for causing a computer to  
3 implement:  
4           modifying said bill of material list based upon said  
5 comparing.

1           26. The storage medium of claim 22, further  
2 comprising instructions for causing a computer to  
3 implement:  
4           transferring said bill of material list to relevant  
5 entities for review or approval.

1           27. The storage medium of claim 26, further  
2 comprising instructions for causing a computer to  
3 implement:  
4           modifying said bill of material list based upon said  
5 review or said approval.



1           28. The storage medium of claim 22, further  
2 comprising instructions for causing a computer to  
3 implement:  
4           transferring said bill of material list to said  
5 user; and  
6           transferring said bill of material list to at least  
7 one of said relevant entities.

1           29. The storage medium of claim 22, wherein said  
2 importing said component parts data to said bill of  
3 material assist application is performed manually by said  
4 user.

1           30. The storage medium of claim 22, wherein said  
2 importing said component parts data to said bill of  
3 material assist application is performed electronically  
4 via said bill of material assist application whereby said  
5 component parts data is stored in a database accessed by  
6 said user.

1           31. The storage medium of claim 22, wherein said  
2 plurality of sources include:  
3           at least one parts database;  
4           at least one procurement database;  
5           at least one computer aided drafting database;  
6           at least one approved vendors database; and  
7           external supplier databases.



1           33. The storage medium of claim 22, further  
2 comprising instructions for causing a computer to  
3 implement providing data pertaining to:

4           map flags;  
5           life cycles;  
6           duplicate local part numbers;  
7           local part numbers;  
8           part descriptions;  
9           leaf class description;  
10          messages;  
11          supplier names;  
12          supplier part numbers;  
13          alternative local part numbers;  
14          quantities;  
15          data providers;  
16          engineering changes;  
17          engineering statuses;  
18          technical usage codes;  
19          engineers names;  
20          supply statuses;  
21          restricted usage codes;  
22          end of life dates;  
23          lead times;  
24          part sourcing statuses;  
25          reference designators;  
26          commodities; and  
27          comments desired by a system user.